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मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

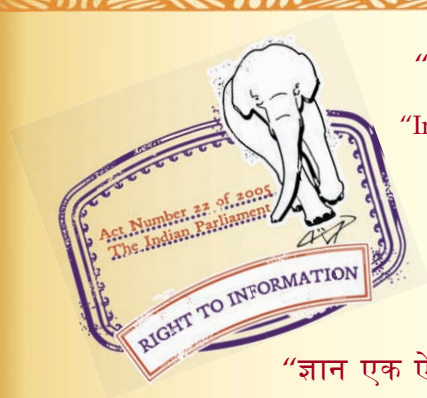
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 10738-4-1 (1991): Flanges for Waveguides, Part 4:
Flanges for Circular Waveguides, Section 1: General [LITD
6: Wires, Cables, Waveguides and Accessories]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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IS 10738 (Part 4/Sec 1) : 1991

भारतीय मानक
तरंग पथकों के फ्लैजों की विशिष्टि

भाग 4 वृत्ताकार तरंग पथकों के लिए फ्लैज
खंड 1 सामान्य

Indian Standard

SPECIFICATION FOR
FLANGES FOR WAVEGUIDES

PART 4 FLANGES FOR CIRCULAR WAVEGUIDES
Section 1 General

UDC 621.643.412 : 621.372.822

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

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Price Group 1

FOREWORD

This Indian Standard (Part 4/Sec 1) was adopted by the Bureau of Indian Standards, after the draft finalized by the Microwave Components and Accessories Sectional Committee had been approved by the Electronics and Telecommunication Division Council.

This standard shall be read in conjunction with IS 10738 (Part 1) : 1983 Flanges for waveguides : Part 1 General requirements and tests.

Different types of waveguide flanges are being covered in a series of standards consisting of the following individual parts of IS 10738 :

Part 1 General requirements and tests

Part 2 Flanges for ordinary rectangular waveguides

Part 3 Flanges for flat rectangular waveguides

Part 4 Flanges for circular waveguides

Part 5 Flanges for medium flat rectangular waveguides

Part 6 Flanges for square waveguides

This Part 4 of IS 10738 series is being issued in two sections as follows :

Section 1 General

Section 2 Flange Type J

While preparing this standard assistance has been derived from IEC Pub 154-4 (1969) 'Flanges for waveguides : Part 4 Relevant specification for flanges for circular waveguides' issued by the International Electrotechnical Commission.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding of numerical values (*Revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***SPECIFICATION FOR
FLANGES FOR WAVEGUIDES****PART 4 FLANGES FOR CIRCULAR WAVEGUIDES****Section 1 General****1 SCOPE**

This Indian Standard (Part 4/Sec 1) specifies general requirements and tests for flanges for circular waveguides.

2 REFERENCES

The following standards have been referred to in this standard :

<i>IS No.</i>	<i>Title</i>
4493 (Part 7) : 1984	Hollow metallic waveguides : Part 7 Circular waveguides
10738 (Part 1) : 1983	Flanges for waveguides : Part 1 General requirements and tests

3 CLIMATIC CATEGORIES

3.1 Provisions of 3 of IS 10738 (Part 1) : 1983 shall apply.

4 MATERIALS, CONSTRUCTION AND WORKMANSHIP

4.1 Provisions of 4 of IS 10738 (Part 1) : 1983 shall apply.

5 DESIGNATION OF FLANGES FOR WAVEGUIDES

5.1 Provisions of 5 of IS 10738 (Part 1) : 1983 shall apply.

6 MARKING

6.1 Provisions of 6 of IS 10738 (Part 1) : 1983 shall apply.

7 PACKAGING

7.1 Provisions of 7 of IS 10738 (Part 1) : 1983 shall apply.

8 TESTS

8.1 Provisions of 8 of IS 10738 (Part 1) : shall be applicable except for / in addition to the following.

8.1.1 The requirements for the characteristics locating holes, shank diameter of fixing bolts used for location, and relation between shank and locating hole diameter are not applicable because location is not affected by bolts and holes.

The cross section of the circlip shown in the drawing in Section 2 is given for information only. The actual cross-section may assume any shape that does not adversely affect the mating of the flanges.

8.1.2 Positioning of the Holes

Positioning of the holes shall be as specified in Section 2 of Part 4 of this series.

8.1.3 Flatness of Contact Area

The flatness of contact area shall be better than the values given below :

<i>Range of Type C Waveguide Size</i>	<i>Requirements (mm)</i>
C 14 and larger dimensions	Under consideration
C 16 to C 28·7	0·03
C 30 to C 53·9	0·02
C 56 to C 136	0·01
C 140 and smaller dimension	Under consideration

8.1.4 Perpendicularity of the Contact Area

The perpendicularity of the contact area of the flange to the axis of the waveguide shall be 90 ± 0.25 degrees.

8.1.5 Additional Requirements

8.1.5.1 The drawings shown in Section 2 are for mounted flanges. In the individual drawings, the through type mounting of flanges to the waveguide is shown by way of example. This, however, does not exclude another method of mounting if the actual dimensions allow this.

8.1.5.2 When ordering unmounted flanges, an allowance should be made on some of the specified dimensions to cover the effects of possible machining after mounting.

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